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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,161

06/11/2007

Ralf Kunze

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EXAMINER

AMORES, KAREN J

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

06/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,161	Applicant(s) KUNZE ET AL.	
	Examiner KAREN JANE J. AMORES	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-7,9-16 and 18-20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 3,8 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/21/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3616

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 13 recites the limitation "said elastomer joints" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4 – 7, 11, and 14 – 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Alesch et al. DE 100 50 772 ("Alesch"). Alesch discloses a four-point control arm (1) for the axle suspension of a rigid axle of a vehicle, the four-point control arm comprising:

Art Unit: 3616

6. a one-piece (fig. 1), rectangular or trapezoidal hollow housing defining four bearing eyes of which two of said bearing eyes are for connection to the axle and two of said bearing eyes are for connection to the vehicle chassis, each in an articulated manner, said hollow housing being formed essentially by a tube (2), arranged horizontally with respect to the vehicle and open on a plurality (S) of sides, with an essentially rounded cross section (fig. 3) ranging from rounded rectangular to O-shaped shape.

7. In reference to claims 2, 4 – 7, and 11, Alesch further discloses said hollow housing designed as a tube (2) open on two sides; wherein said hollow housing is reduced relative to the longitudinal axis of the vehicle in the vehicle-related top view; wherein said hollow housing is reduced relative to the transverse axis of the vehicle in the vehicle-related top view; wherein said hollow housing has an essentially one-piece cross-shaped (fig. 1) or X-shaped shape in the vehicle-related top view with a central housing area (2) and four said peripheral control arms carrying said bearing eyes; wherein said control arms are designed as carriers subject to bending which are profiled in said cross section; and wherein said bearing eyes are made integrally in one piece with said hollow housing.

8. In reference to claims 14 and 16, Alesch discloses a four-point control arm comprising:

9. a one-piece tubular housing (2) with a tube open (S) on two sides, said tubular housing defining four bearing eyes including two vehicle axle bearing eyes and two vehicle chassis bearing eyes, said tubular housing tube having an essentially rounded cross section ranging from rounded rectangular to an O-shaped shape (2).

10. In reference to claim 16, Alesch further discloses said hollow housing has central housing area and peripheral control arms each with one of said four bearing eyes, said central housing

Art Unit: 3616

area and peripheral control arms having an essentially one-piece cross-shaped (fig. 2) or X-shaped shape.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alesch in view of McCoy et al. 6,010,142 (“McCoy”). Alesch, without full translation, may be silent to the material of the four-point control arm. McCoy teaches a bainitic cast iron material. It would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify Alesch such that it comprised the bainitic cast iron in view of the teachings of McCoy so as to result in additional strength, particularly for trailer towing applications (column 5, line 66).

13. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alesch in view of Bublies et al. U.S. 6,129,367 (“Bublies”). Alesch, may not directly disclose elastomer joints or molecular joints. Bublies teaches bearing eyes having elastomer and molecular joints (13). It would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify Alesch such that it comprised the elastomer and molecular joints

Art Unit: 3616

in view of the teachings of Bublies so as to provide cardanically moveable connections between the control arm, the axle, and frame (column 5, line 53).

14. Claims 13 and 20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alesch in view of Ikeda, JP 05209696 ("Ikeda"). Alesch does not directly disclose the radial stiffness of the joints. Ikeda teaches the radial stiffness of the joints is lower in the direction of roll of the vehicle than in the direction extending at right angles to the direction of roll. It would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify Alesch such that it comprised the radial stiffness of the joints in view of the teachings of Ikeda so as to make a bush lightweight and prolong the life without increasing cost (abstract).

Allowable Subject Matter

15. Claims 3 , 8, 15, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN JANE J. AMORES whose telephone number is (571)272-6212. The examiner can normally be reached on Monday through Friday, 8:00 AM - 5:00 PM.

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571)-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GLENN DAYOAN/
Supervisory Patent Examiner, Art Unit 3612

KAREN J AMORES
Examiner
Art Unit 3616

/K. J. A./
Examiner, Art Unit 3616